



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/460,197	12/13/1999	JOHN SPENCER CUNNINGHAM	A65-25311	2142

128 7590 02/01/2007
HONEYWELL INTERNATIONAL INC.
101 COLUMBIA ROAD
P O BOX 2245
MORRISTOWN, NJ 07962-2245

EXAMINER

NGUYEN, KEVIN M

ART UNIT	PAPER NUMBER
----------	--------------

2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
2 MONTHS	02/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/460,197
Filing Date: December 13, 1999
Appellant(s): CUNNINGHAM ET AL.

MAILED

FEB 01 2007

Technology Center 2600

Alison J. Baldwin
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/11/2006 appealing from the Office action mailed 12/16/2004.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

3,665,454	STODDARD ET AL.	5-1972
5,513,365	COOK ET AL.	4-1996

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 33-36, 38-46, 48-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoddard et al. (US 3,665,454) in view of Cook et al. (US 5,513,365).

As to claims 33, 38, 43, and 48, Stoddard et al. teaches a computer system for driving a plurality of displays of different types associated with a method, the computer system comprising

a display generator apparatus (13, fig. 1) drives a plurality of displays of different types including any type of symbol generator, such as a line (or vector), conic, character, and other types of symbol generator (stroke displays, col. 4, lines 70-73), video images on both indicators displays 20 for simultaneous visual observation (raster displays, fig. 1, col. 4, lines 53-54), and graphics or video data can be mixed with graphic or symbolic data for display on a common CRT screen (hybrid displays, col. 4, lines 59-61);

a display selector (17) (dynamic switching between displays in real time, fig. 1, col. 3, line 1).

Art Unit: 2629

Stoddard et al. teaches all of the claimed limitations of claims 33, 38, 43, 48, except for "linking generated code from said formats to a standard graphics library...a signal display routine."

However, Cook et al. teaches a graphics adapter interface (GAI) 700 (fig. 4) linking a specific code 661-683 (linking generated code, fig. 4) from a 3-D graphics GL application (formats 605, fig. 4) to a 3-D application programming interface (API) (620) (graphics library, GL) (fig. 4). The graphics library GL defined a single display routine as claimed.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Stoddard's interface unit including a graphics adapter interface (700) linking a specific code 661-683 from a 3-D graphics GL application (605) to a 3-D AP (620), in view of the teaching in the Cook's reference because this would provide new application and new display adapters may be ported to a computer system with less efforts than previously needed, sophisticated and coordinated functions such as buffer deferral or tracing, easier maintenance of the computer system as taught by Cook et al (see col. 6, lines 43-49).

As to claims 34, 39, 44, 49, Cook et al. teaches the graphics library GL is an Open GL graphics library.

As to claims 35, 42, 45, 52, Cook et al. teaches the specific code 661-683 (generated code formats, fig. 4)

Art Unit: 2629

As to claims 36, 40, 46, 50, Cook et al. teaches a host computer 405 (a stroke video driver, fig. 3) including memory (420) (occlusion memory, fig. 3, col. 3, lines 17-25).

As to claims 41, 51, Stoddard et al. teaches a display selector (17) (dynamic switching between displays in real time, col. 3, line 1).

(10) Response to Argument

A. Ground of Multiple references rejection:

Although the invention is not identically disclosed or described as set forth in 35 U.S.C.102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer of ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

This modification of the primary reference in light of the secondary reference is proper because the applied references are so related that the appearance of features shown in one would suggest the application of those features to the other. See *In re Rosen*, 673 F.2d 388, 213 USPQ 347 (CCPA 1982); *In re Carter*, 673 F.2d 1378, 213 USPQ 625 (CCPA 1982), and *In re Glavas*, 230 F.2d 447, 109 USPQ 50 (CCPA 1956). Further, it is noted that case law has held that one skilled in the art is charged with knowledge of the related art; therefore, the combination of old elements, herein, would have been well within the level of ordinary skill. See *In re Antle*, 444 F.2d 1168, 170 USPQ 285 (CCPA 1961) and *In re Nalbandian*, 661 F.2d 1214, 211 USPQ 782 (CCPA 1982).

When the reference relied on expressly anticipates or makes obvious all of the elements of the claimed invention, the reference is presumed to be operable. Once such a reference is found, the burden is on appellant to provide facts rebutting the presumption of operability. *In re Sasse*, 629 F.2d 675, 207 USPQ 107 (CCPA 1980). See also MPEP § 716.07.

Where, however, the specification is silent as to what constitutes equivalents and the examiner has made out a prima facie case of equivalence, the burden is placed upon the appellant to show that a prior art element which performs the claimed function is not an equivalent of the structure, material, or acts disclosed in the specification. See *In re Mulder*, 716 F.2d 1542, 1549, 219 USPQ 189, 196 (Fed. Cir. 1983). If the appellant disagrees with the inference of equivalence drawn from a prior art reference, the appellant may provide reasons why the appellant believes the prior art element should not be considered an equivalent to the specific structure, material or acts disclosed in the specification. Such reasons may include, but are not limited to: (A) Teachings in the specification that particular prior art is not equivalent; (B) Teachings in the prior art reference itself that may tend to show nonequivalence; or (C) 37 CFR 1.132 affidavit evidence of facts tending to show nonequivalence.

In response to appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Art Unit: 2629

B. Ground of Stoddard et al. in view of Cook et al. rejection:

Appellant argues the combination of Stoddard et al. in view of Cook et al. fails to teach with respect to claims 33, 38, and 43 recited "driving a plurality of displays of different types with a single display routine, the plurality of displays comprising stroke displays, raster displays and hybrid displays." In response, the examiner respectfully disagrees. As stated *infra* with respect to claims 33, 38 and 43, the examiner finds that Stoddard et al. teaches a single display generator which drives stroke display, raster display such as graphic or video data, and hybrid display comprising the stroke display and graphic display, which are displayed on the CRT screen (see col. 4, lines 59-61, and col. 5, lines 35-40 of Stoddard et al). It is noted that the raster display is raster graphics and raster scan comprising graphical techniques using arrays of pixel values the pattern of image readout in any CRT, LCD, plasma display screen. Stroke is writing by stylus on the PDA, graphic tablet and touch screen. A stylus that secretes no ink touches a touch screen instead of a finger to avoid getting the natural oil from one's hands on the screen. Furthermore, it may be realized by using hardware (a single display generator) and by using the software (a single display routine) on the computer are logically equivalent. Moreover, those skilled in the computer art it is obvious that such an implementation can be expressed in terms of either computer program (a single display routine) or a computer circuitry (a single display generator) implementation, the two being functional equivalent of one another. See *In re Ruff*, 256 F. 2d 590, 118 USPQ 340, 343 (CCPA 1958).

Art Unit: 2629


Appellant argues the combination of Stoddard et al. in view of Cook et al. fails to teach with respect to claims 33, 38, and 43 recited "linking generated code from the formats to a standard graphics library." In response, the examiner respectfully disagrees. As stated *supra* with respect to claims 33, 38, and 43, the examiner finds that Cook et al. teaches a graphics adapter interface (GAI) 700 linking a specific code 661-683 (linking generated code, fig. 4) from a 3-D graphics GL application (formats 605) to a 3-D application programming interface (API) (620) (graphics library, GL) (fig. 4, col. 3, lines 45-57).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.


Respectfully submitted,


Kevin M. Nguyen
Patent Examiner
Art Unit 2629

Conferees:

Richard Hjerpe




RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600